CURRICULUM VITAE

Marc F. Joanisse

Professor

The University of Western Ontario

Employment History:

2014-present Professor, Department of Psychology

The University of Western Ontario

2015-present Affiliated Scientist

Haskins Laboratories

Yale University / University of Connecticut

2014-present Associate Chair of Graduate Studies, Department of Psychology

The University of Western Ontario

2006-2014 Associate Professor, Department of Psychology

The University of Western Ontario

2000-2006 Assistant Professor, Department of Psychology

The University of Western Ontario

Member: UWO Brain and Mind Institute

Neuroscience Graduate Training Programme

Linguistics Graduate and Undergraduate Programmes

Educational History

2000	Ph.D.	University of Southern California
1998	M.A.	University of Southern California
1995	BA	McGill University

Academic Honours

2013-2015	Faculty Scholar, The University of Western Ontario
2004-2008	Premier's Research Excellence Award
2003-2009	New Investigator Award, Canadian Institutes for Health Research
1998-2000	PGS-B Postgraduate research award, National Sciences and Engineering Research Council
1996-2000	Dean's Fellowship, University of Southern California

Research Contributions (underlined names denote trainees)

Refereed Articles

1. <u>Nichols, E.S.</u> & Joanisse, M.F. (in press). Functional activity and white matter microstructure reveal the independent effects of age of acquisition and proficiency on second-language learning. *NeuroImage*.

- 2. Jared, D.J., Jouravlev, O. & Joanisse, M.F. (in press). The Effect of Semantic Transparency on the Processing of Morphologically Derived Words: Evidence from Decision Latencies and Event-Related Potentials *Journal of Experimental Psychology: Learning, Memory, and Cognition*.
- 3. Joanisse, M.F. & McClelland, J.L. (2015). Connectionist perspectives on language learning, representation and processing. *WIREs Cognitive Science*. doi: 10.1002/wcs.1340
- 4. <u>Welcome, S.E.,</u> Pasquarella, A., Chen, X., Olson, D.R. & **Joanisse, M.F.** (2014). Preserved Mid-Fusiform Activation for Visual Words in a Patient with a Visual Word Recognition Impairment. *Neuropsychologia.* 65: 113:124. doi:10.1016/j.neuropsychologia.2014.10.012
- 5. Malins, J.G., Gao, D., Tao, R., Booth, J., Shu, H., **Joanisse, M.F.**, Liu, L. & Desroches, A.S. (2014). Developmental differences in the influence of phonological similarity on spoken word processing in Mandarin Chinese. *Brain and Language Brain and Language.* 138: 38-50. Doi 10.1016/j.bandl.2014.09.002
- 6. **Joanisse, M.F.** & <u>Desouza, D.D.</u> (2014) Sensitivity of human auditory cortex to rapid frequency modulation revealed by multivariate representational similarity analysis. *Frontiers in Neuroscience*. 8:306. doi: 10.3389/fnins.2014.00306
- 7. Welcome, S.E. & **Joanisse**, **M.F.** (2014). Individual differences in white matter anatomy predict dissociable components of reading skill in adults. *NeuroImage*, *96*, 261-75. doi: 10.1016/j.neuroimage.2014.03.069
- 8. Sheikh, H, **Joanisse, M.F.**, Mackrell, S., Kryski, K., Smith, H., Singh, S. & Hayden, E. (2014). Links between white matter microstructure and cortisol reactivity to stress in early childhood: Evidence for moderation by parenting. *NeuroImage: Clinical. 6*, 77-85. DOI: 10.1016/j.nicl.2014.08.013
- 9. Andrew, K., Hoshooley, J. & **Joanisse**, **M.F.** (2014) Sign language ability in young deaf signers predicts comprehension of written sentences in English. *PLoS One 9(2): e89994. doi:* 10.1371/journal.pone.0089994
- 10. McNorgan, C. **Joanisse, M.F.** (2014). A connectionist approach to mapping the human connectome permits simulations of neural activity within an artificial brain *Brain Connectivity 4: (1), 40-52. doi:10.1089/brain.2013.0174*
- 11. Archibald, L.M.D., Oram Cardy, J., **Joanisse, M.F.** & Ansari, D. (2013). Language, Reading, and Math Learning Profiles in an Epidemiological Sample of School Age Children. *PLoS One, 10*:8. E77463.
- 12. <u>Malins, J.G., Desroches, A.S., Robertson, E.K., Newman R.L., Archibald, L.</u> & **Joanisse, M.F.** (2013). ERPs reveal the temporal dynamics of auditory word recognition in specific language impairment. *Developmental Cognitive Neuroscience, 5,* 138-148.
- 13. <u>Archibald, L.M.D.</u>, & **Joanisse, M.F.** (2013). Domain-specific and domain-general constraints on word and sequence learning. *Memory and Cognition.* 41, 2 268-280.
- 14. Brown, T.A., **Joanisse, M.F.**, Gati, J.S., Hughes, S.M., Nixon, P.L., Menon, R.S. & Lomber, S.G. (2013). Characterization of the blood-oxygen level-dependent (BOLD) response in cat auditory cortex using high-field fMRI. *NeuroImage*, *64*, 458-465.
- 15. <u>Archibald, L.M.D.</u>, & **Joanisse, M.F.** (2012). Atypical neural responses to phonological detail in children with developmental language impairments. *Developmental Cognitive Neuroscience*, *2*, 139-151.
- 16. <u>Desroches, A.S., Newman, R.L., Robertson, E.K.</u> & **Joanisse, M.F.** (2013). Electrophysiological indices of phonological impairments in dyslexia. *Journal of Speech-Language and Hearing Research,* 56 250-264.
- 17. Robertson, E.K. & **Joanisse**, **M.F.** (2013). Past-tense morphology and phonological deficits in children with dyslexia and children with language impairment. *Journal of Learning Disabilities*. *46*: 3, 230-240.

- 19. Sutton, J.E., <u>Twyman, A.D.</u>, **Joanisse, M.F.** & Newcombe N.S. (2012). Geometry three ways: An fMRI investigation of geometric information processing during reorientation. *Journal of Experimental Psychology: Learning Memory and Cognition.* 38, 6, 1530-1541.
- 20. Welcome S.E. & Joanisse M.F. (2012). Individual differences in skilled adult readers reveal dissociable patterns of neural activity associated with component processes of reading. *Brain and Language*, 120: 3, 360-71.
- 21. Malins, J.G. & **Joanisse**, **M.F.** (2012) Setting the Tone: An ERP Investigation of the Influences of Phonological Similarity on Spoken Word Recognition in Mandarin Chinese. *Neuropsychologia*, 50.,2032-2043.
- 22. <u>Friesen, D. C.</u> & **Joanisse**, **M. F.** (2012). Homophone effects in deaf readers: Evidence from lexical decision. *Reading and Writing: An Interdisciplinary Journal*, *25*. 375-388.
- 23. <u>Archibald, L.M.D.</u> & **Joanisse, M.F.** (2011). Electrophysiological responses to coarticulatory and word level miscues. *Journal of Experimental Psychology: Human Perception and Performance, 37.* 1275-1291.
- 24. Welcome S.E., Paivio A., McRae K., **Joanisse M.F**. (2011). An electrophysiological study of task demands on concreteness effects: evidence for dual coding theory. *Experimental Brain Research*, 212 (3):347-58.
- 25. Andres, A.J.D., Oram Cardy, J.D. & **Joanisse**, **M.F.** (2011). Congruency of Auditory Sounds and Visual Letters Modulates Mismatch Negativity and P300 Event-Related Potentials. *International Journal of Psychophysiology*, *79*, 137-146.
- 26. Slevc, L.R., Martin R.C., Hamilton A.C., **Joanisse, M.F.** (2011). Speech perception, rapid temporal processing, and the left hemisphere: A case study of unilateral pure word deafness. *Neuropsychologia, 49* (2), 216-230.
- 27. <u>Archibald, L.M.D.</u>, Edmunds, A., & **Joanisse, M.F.** (2011). Specific language or working memory impairments: Are there observable differences? *Child Language and Teaching Therapy, 27*, 294-312.
- 28. <u>Archibald, L.M.D.</u> & **Joanisse, M.F.** (2011). Electrophysiological responses to coarticulatory and word level miscues. *Journal of Experimental Psychology: Human Perception and Performance*, 37 (4), 1275-1291.
- 29. Newman, R.L. & **Joanisse**, **M.F.** (2011). Modulation of brain regions involved in word recognition by homophonous stimuli: An fMRI study. *Brain Research*, *1387*, 250-264.
- 30. <u>Kielar A, **Joanisse M.F.**</u> (2011). The role of semantic and phonological factors in word recognition: An ERP cross-modal priming study of derivational morphology. *Neuropsychologia*, *49* (2), 161-177.
- 31. Mirkovic, J., Seidenberg, M.S., & **Joanisse**, **M.F.** (2011). Probabilistic nature of inflectional structure: Insights from a highly inflected language. *Cognitive Science*, *35* (4), 638-681.
- 32. Sutton, J.E., **Joanisse, M.F.** & Newcombe, N.S. (2010). Spinning in the scanner: Neural correlates of virtual reorientation. *JEP: Learning, Memory, and Cognition*, *36* (5), 1097-1107.
- 33. Malins, J.G., & **Joanisse**, **M.F.** (2010). The roles of tonal and segmental information in Mandarin spoken word recognition: An eyetracking study. *Journal of Memory and Language*, *62* (4), 407-420.
- 34. <u>Kielar, A.</u>, & **Joanisse, M.F.** (2010). Graded Effects of Regularity in Language Revealed by N400 Indices of Morphological Priming. *Journal of Cognitive Neuroscience*, 22, 1373-1398.
- 35. Robertson, E.K. & **Joanisse**, **M.F**. (2010). Spoken sentence comprehension in children with dyslexia and language impairment: The roles of syntax and working memory. *Applied Psycholinguistics*, *31*, 141-165.
- 36. Woollams, A.M., **Joanisse, M.F.,** & Patterson, K. (2009). Past-tense generation from form and meaning: Behavioural data and simulation evidence. *Journal of Memory and Language, 61,* 55-76.

- 37. Arnell, K., **Joanisse, M.F.**, Klein, R.D., Busseri, M., & Tannock, R. (2009). Decomposing the relation between Rapid Automatized Naming (RAN) and reading ability. *Canadian Journal of Experimental Psychology*, 63, 173-184.
- 38. <u>Archibald, L.M.D.</u>, **Joanisse, M.F.** & Gathercole, S (2009). Multisyllabic nonwords: More than a string of syllables. *Journal of the Acoustical Society of America*, 125, 1712-1722.
- 39. <u>Archibald, L.M.D.</u>, **Joanisse, M.F.** (2009). On the sensitivity and specificity of nonword repetition and sentence recall to language and memory Impairments in Children. *Journal of Speech, Language, and Hearing Research*, 52, 899-914.
- 40. Robertson, E.K., **Joanisse, M.F.**, <u>Desroches, A.S.</u> & <u>Ng, S.</u> (2009). Categorical speech perception deficits distinguish language and reading impairments in children. Developmental Science, 12, 753-767.
- 41. <u>Desroches, A.S. Newman, R.L.</u> & **Joanisse, M.F.** (2009). Investigating the time course of spoken word recognition: Electrophysiological evidence for the influence of phonological similarity. Journal of Cognitive Neuroscience, 21(10), 1893-1906.
- 42. <u>Poppenk, J., Walia, G.</u>, McIntosh, A.R., **Joanisse, M.F.**, Klein, D. & Köhler, S. (2008). The neural substrates of the verbatim effect for auditorily apprehended information: revealed with fMRI. Hippocampus 18 (9):909-18.
- 43. <u>Kielar, A.</u>, **Joanisse, M.F.** & Hare, M.L. (2008). Priming English past tense verbs: Rules or statistics?, *Journal of Memory and Language* 58(2):327-346.
- 44. <u>Frewen, P.A.</u>, Dozois, D.J.A., **Joanisse, M.F** & Neufeld, R.J. (2008). Selective attention to threat versus reward: Meta-analysis and neural-network modeling of the dot-probe task. *Clinical Psychology Review*, *28*(2), 308-338.
- 45. <u>Archibald, L.M.D.</u>, **Joanisse, M.F**. & <u>Shepherd, M.</u> (2008). Associations Between Key Language-Related Measures in Typically Developing School-Age Children. *Journal of Psychology, 216*(3): 162-172.
- 46. **Joanisse, M.F.**, Zevin, J.D. & McCandliss, B.D. (2007). Brain mechanisms implicated in the preattentive categorization of speech sounds revealed using fMRI and short interval habituation trials. *Cerebral Cortex*, *17* 2084-2093. doi:10.1093/cercor/bhl124
- 47. **Joanisse, M.F.,** Robertson, E.K. & Newman, R.L. (2007). Mismatch negativity measure of sensory vs. phonetic speech perception. *NeuroReport.* 18(9) 901-905.
- 48. Arnell K.M., Howe, A.E., **Joanisse, M.F.** & Klein, R.M. (2006). Relationships between attentional blink magnitude, RSVP target accuracy, and performance on other cognitive tasks. *Memory and Cognition,* 34 (7): 1472-1483. [I.F. 1.41]
- 49. <u>Desroches, A.S.</u>, **Joanisse, M.F.** & <u>Robertson, E.K.</u> (2006). Specific phonological impairments in dyslexia revealed by eyetracking. *Cognition, 103* (3), B32-B42.
- 50. Howe, A.E., Arnell K.M., Klein, R.M., **Joanisse, M.F.** & Tannock, R. (2006). The ABCs of computerized naming: equivalency, reliability, and predictive validity of a computerized Rapid Automatized Naming (RAN) Task. *Journal of Neuroscience Methods*, *151* (1), 30-37.
- 51. **Joanisse, M.F.** & Seidenberg, M.S. (2005). Imaging the past: Neural activation in frontal and temporal region during regular and irregular past tense processing. *Cognitive, Affective and Behavioral Neuroscience*, 5, 282-296.
- 52. **Joanisse**, **M.F.** (2004). Specific Language Impairments in children: Phonology, semantics and the English past tense. *Current Directions in Psychological Science*, *13(4)*, 156-160.
- 53. Ferber S., Danckert J., **Joanisse M.F.**, Goltz H.C. & Goodale M.A. (2003). Eye movements tell only half the story, *Neurology*, *60*, 1826-1829.
- 54. **Joanisse**, **M.F.** & Gati, J.G. (2003). Overlapping neural regions for processing speech and nonspeech sounds, *NeuroImage*, *19*, 64-79.

- 55. **Joanisse**, **M. F.** & Seidenberg, M. S. (2003). Phonology and syntax in specific language impairment: Evidence from a connectionist model. *Brain and Language*, *86*(1), 40-56.
- 56. **Joanisse, M.F.,** Manis, F.R., Keating, P. & Seidenberg, M.S. (2000). Language deficits in dyslexic children: Speech perception, phonology and morphology, *Journal of Experimental Child Psychology*, 77, 30-60.
- 57. Manis, F.R., Seidenberg, M.S., Stallings, L., **Joanisse, M.F.**, Bailey, C., Freedman, L. & Curtin, S. (1999). Development of dyslexic subgroups: A one-year follow-up, *Annals of Dyslexia*, *49*, 105-134.
- 58. **Joanisse**, **M.F.** & Seidenberg, M.S. (1999) Impairments in verb morphology following brain injury: A connectionist model, *Proceedings of the National Academy of Sciences*, *USA*. *96*, (13), 7592-7597.
- 59. **Joanisse**, **M.F.** (1999). Exploring syllable structure in connectionist networks. *Proceedings of the XIVth International Congress of Phonetic Sciences*, San Francisco CA.
- 60. **Joanisse, M.F.** & Seidenberg, M.S. (1998). Specific Language Impairment in children: An impairment in grammar or processing? *Trends in Cognitive Sciences*, *2*(7) 240-246.
- 61. **Joanisse, M.F.** & Seidenberg, M.S. (1998). Functional bases of phonological universals: A connectionist approach. *Proceedings of the 18th Annual Meeting of the Berkeley Linguistics Society,* Berkeley, CA.
- 62. **Joanisse & M.F.** & Seidenberg, M.S. (1997). [i e a u] and sometimes [o]: Perceptual and computational constraints on vowel inventories. *Proceedings of the 15th Annual Conference of the Cognitive Science Society*, Stanford, CA.

Books

63. Spivey, M., **Joanisse, M.F.** & McRae, K., eds. *The Cambridge Handbook of Psycholinguistics*. Cambridge University Press. (2012)

Scientific Notes

- 64. Seidenberg, M.S. & **Joanisse**, **M.F** (2003). Show us the model. *Trends in Cognitive Sciences*, 7, 106-107.
- 65. **Joanisse, M.F.** & Haskell, T. (1999). The dual mechanism model of inflectional morphology: A connectionist critique, *Behavioral and Brain Sciences*, 22(6).

Book Chapters/Collections

- 66. **Joanisse**, **M.F.** (in press). Model-based approaches to understanding child language disorders. *The Handbook of Child Language Disorders*, 2nd Edition (Ed. Schwartz). Psychology Press.
- 67. Malins, J. & **Joanisse**, **M.F.** (2012). Towards a Model of Tonal Processing During Mandarin Spoken Word Recognition. *Proceedings of the Third International Symposium on Tonal Aspects of Languages*.
- 68. **Joanisse, M.F.** (2012) James McClelland. Biography to appear in *The Wiley Encyclopedia of Applied Linguistics*.
- 69. Joanisse, M.F. & Desroches, A.S. (2010) Dyslexia. The Sage Encyclopedia of Perception.
- 70. **Joanisse, M.F.** (2009) Reading in a Biological Context. *CLLRNet Encyclopedia of Language and Literacy.*
- 71. **Joanisse**, **M.F.** (2009). Model-based approaches to understanding child language disorders. *The Handbook of Child Language Disorders*, (Ed. Schwartz). Psychology Press.

- 72. **Joanisse, M.F.** (2007). Phonological deficits and developmental language impairments. *Neuroconstructivism Vol II: Perspectives and Prospects,* (Eds. Mareschal, Sirois & Westermann), Oxford University Press.
- 73. **Joanisse M.F.** & Curtin, S. (1999). OT and connectionist accounts of Dutch stress acquisition, *Proceedings of SWOT V*, UC San Diego: Linguistics Notes From La Jolla.

Talks and Presentations (* denotes invited talks)

- 1. Association of Children's Coarticulatory Sensitivity with Language and Reading Skills Revealed by Eyetracking. (With Cross, A.) Poster presented at the Symposium on Research in Child Language Disorders, June 2016, Madison, WI, USA.
- 2. Individual Variation in the Time-Course of Statistical Language Learning: An ERP Investigation (With Noonan, N.B. & Archibald, L. M. D.) Poster presented at the Symposium on Research in Child Language Disorders, June 2016, Madison, WI, USA.
- 3. Exploring individual differences in second-language learning using multimodal neuroimaging. (With Nichols, E. S.) Talk presented at the joint BMI/Donders Cognitive Neuroscience Symposium, May 31, 2016.*
- 4. Children's Numerical Magnitude Processing Predicts Subsequent Early Reading Skill@@(with Kayla R. Perlmutter & Alexandra M. Cross). Poster presented at IWORDD workshop, Bilbao, Spain, May 6, 2016.
- 5. Using Eyetracking and Event-Related Potentials to Study Language Processing in Children and Adults. Talk presented at Dalhousie University, Department of Psychology Colloquium Series, January 15, 2016.*
- 6. Maturational Delay in Auditory Evoked Potentials in Children with Specific Language Impairment. (With Kwok, E. Y. L., Archibald, L. M. D., & Oram Cardy, J.) Poster presented at the Symposium on Research in Child Language Disorders, June 2015, Madison, WI, USA. (Presented by E. Kwok)
- 7. Maturational Differences in Auditory Event-Related Potentials According to Presence Versus Absence of Language Impairment in Children with Autism Spectrum Disorder. (With Kwok, E. Y. L., Archibald, L. M. D., Nicolson, R., Smyth, R., Oram Cardy, J.) Poster presented at the International Meeting for Autism Research, June, 2015, Salt Lake City, UT, USA. (Presented by E. Kwok)
- 8. Gray- and white-matter correlates of individual differences in reading and second language learning. (With Welcome, S. & Nichols, E.S.) Talk presented at the Canadian Society for Brain, Behaviour and Cognitive Sciences, Past President's Symposium. Ottawa Ontario, June 7, 2015 *
- 9. Joanisse, M.F. Phonological Bases of Language and Reading Impairments in Children: Same or Different. Talk presented at University of Texas, Austin TX, USA. April 22, 2015 *
- Eyetracking of coarticulatory cue responses in children and adults. (With Cross, A.) Poster presented at the Lake Ontario Visionary Establishment conference, Niagara Falls Ontario, Feb 5th and 6th, 2015. (Presented by A. Cross)
- 11. Visualizing the brain's reading network in time and space using eyetracking, ERP and MRI. Talk presented at Haskins Laboratories, Yale University, New Haven CT, USA. Feb 19, 2015*
- 12. Discovering Reading in the Brain Through Neuroimaging. Talk presented at University of Winnipeg, Winnipeg MB. November 28, 2014 *
- 13. Proficiency and age of acquisition predict brain activation and white matter connectivity in Mandarin-English bilinguals. (With Nichols, E.S.) Poster presented at the Ninth International Conference on the Mental Lexicon, Niagara-on-the-Lake, Canada. September, 2014. (Presented by E. Nichols)

- 14. The downstream consequences of form-to-expectation mismatch. (With Nichols, E.S., Farmer, T.A.) Poster presented at the Architectures and Mechanisms for Language Processing 2014 Annual Meeting, Edinburgh, UK. September, 2014. (Presented by E. Nichols)
- 15. Proficiency and age of acquisition predict brain activation and white matter connectivity in Mandarin-English bilinguals. (With Nichols, E.S.) Poster presented at the Society for the Neurobiology of Language 2014 Annual Meeting, Amsterdam, NL. August, 2014. (Presented by E. Nichols)
- 16. Individual differences in skilled adult readers show dissociable functional and white matter networks supporting component processes of reading. (With Welcome, S.) Talk presented at the Society for the Scientific Study of Reading annual meeting. July 27, 2014 Santa Fe, NM, USA.
- 17. The typical and atypical development of the reading brain. Talk Presented at the University of Western Ontario Faculty of Education Mind Brain and Education Research Day, November 2013.*
- 18. The Tri-council Framework On Responsible Conduct In Research: A Panel Member And Researcher's Perspective. Talk presented at the CAURA Ontario 2013 Regional Conference, Guelph Ontario, November 2013.*
- 19. Measuring Implicit Phonological Processing With Eye Tracking and Event-Related Potentials. Talk presented at McMaster University Department of Linguistics, November, 2013.*
- 20. Proficiency and Age of Acquisition Independently Modulate Brain Activity in Mandarin-English Bilinguals. (with E.S. Nichols). Poster presented at the 54th Meeting of the Psychonomic Society. Toronto Ontario, November 2013. (Presented by E. Nichols)
- 21. Lexical processing in second Language Learning What Do We Know? (with Nichols, E.S.) Talk presented at the 20th Annual Meeting of the Society for the Scientific Study of Reading, The Chinese University of Hong Kong, July, 2013.
- 22. Auditory Temporal Integration in Children with Specific Language Impairment (SLI) Compared to Same Age Controls. (E. Kwok, L.M.D. Archibald, H.M. Brown, R. Smyth, M.E. Stothers, & J. Cardy.) Poster presentation at the Canada-Israel Symposium on Brain Plasticity, Learning and Education, University of Western Ontario, London, ON, June, 2013. (Presented by E. Kwok)
- 23. Hypothalamic-pituitary-adrenal axis stress reactivity is associated with differences in white matter integrity in young girls. (with Sheikh, H.I., Mackrell, S.V., Kryski, K.R., Smith, H.J, Singh, S.M, & Hayden E.P.) Poster presentation at the Canada-Israel Symposium on Brain Plasticity, Learning and Education, University of Western Ontario, London, ON, 2013. (Presented by H. Sheikh)
- 24. Common and unique cognitive predictors of language, reading, and mathematics skills in children. (with Archibald, L., Olino, T., Oram Cardy, J., & Ansari, D.) Talk presented at the Annual Symposium on Research in Child Language Disorders, Madison, Wisconsin, June, 2013. (Presented by L. Archibald)
- 25. Separable language and working memory factors predict academic performance in children. (with Archibald, L., Olino, T., Oram Cardy, J. & Ansari, D.) Talk presented at the Child Language Seminar, Manchester, UK, June, 2013. (Presented by L. Archibald)
- 26. Implicit measures of phonological processing Evidence from eye tracking, ERP and fMRI. Talk presented at University of Pennsylvania Institute for Research in Cognitive Science, February 2013.*
- 27. Do age of acquisition and proficiency independently modulate brain activation in second language speakers? (with Nichols, E.S.) Poster presented at the Lake Ontario Visionary Establishment 42nd annual meeting, Niagara Falls, ON. February, 2013. (Presented by E.S. Nichols)
- 28. Organization of the Human Auditory Cortex: Responses to Frequency Modulated Sounds. (with D. Desouza). Poster presented at the Lake Ontario Visionary Establishment 42nd annual meeting, Niagara Falls, ON. February, 2013. (Presented by D. Desouza)
- 29. Using eyetracking and event-related potentials to assess speech perception difficulties in language and reading impairment. Talk presented at the University of Iowa DeLTA Center, October 2012*

- 30. Auditory temporal integration in children with language impairment. (with J. Oram Cardy, E. Harnel, D. Purcell & L. Archibald) Symposium on Research in Child Language Disorders, Madison WI, June 2012. (Presented by J. Oram Cardy)
- 31. The independence of rapid naming speed and phonological awareness in reading development. (with J. Coady & L. Archibald) Symposium on Research in Child Language Disorders, Madison WI, June 2012. (Presented by J. Coady)
- 32. An fMRI Investigation of Mandarin Tonal Processing Using Short-Interval Habituation. (with J.G. Malins) Organization for Human Brain Mapping, Beijing, China. June 2012. (Presented by J.G. Malins)
- 33. Towards a Model of Tonal Processing During Mandarin Spoken Word Recognition. (with J.G. Malins) Third International Symposium on Tonal Aspects of Languages, Nanjing, China. May 2012. (Presented by J.G. Malins)*
- 34. DTI Reveals Associations Between White Matter Structure And Reading Skill In Typical Adults. (with S. Welcome) Cognitive Neuroscience Society Annual Meeting. Chicago, IL, March-April 2012. (Presented by S. Welcome)
- 35. Characterisation of the BOLD response in cat auditory cortex. (with T.A. Brown & S.G. Lomber) Association for Research in Otolaryngology, San Diego CA, February 2012. (Presented by T.A. Brown)
- 36. There is more than one way to scan a cat: An assessment of two imaging techniques for optimal auditory cortex activation. (with A.J. McMillian, T.A. Brown, J. Grahn & S.G. Lomber) Association for Research in Otolaryngology, San Diego CA, February 2012. (Presented by A.J. McMillian)
- 37. Specific Language and Working Memory Impairments: Evidence and Learning Patterns. (with L.M.D. Archibald) International Association for the Study of Child Language. Montreal QC, July 2011. (Presented by L.M.D. Archibald)
- 38. When a writer can't read: A case study of Pure Alexia. (with Pasquarella, A., Welcome, S.E., Chen, X. & Olson, D.) Presented at the Canadian Psychological Association Convention, Toronto ON, June 2011. (Presented by A. Pasquarella)
- 39. Preserved Mid-Fusiform Activation for Familiar Words in a Patient with Pure Alexia: Blindsight for Written Words? (with Welcome, S.E., Pasquarella, A., Chen, X. & Olson, D.) Presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA, March 2011. (Presented by S.E. Welcome)
- 40. An ERP Investigation of Tonal and Phonemic Processing in Mandarin Chinese Spoken Word Recognition. (with J.G. Malins) Presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA, March 2011. (Presented by J.G. Malins)
- 41. What studying the brain tells us about speech and reading disorders in children. (with Archibald, L.M.D.) Part of the Psychology Department's London Public Library Series 2011 "Mind Your Words: The Science of Human Language", April 2011.*
- 42. Lexical factors influencing processing of English inflectional morphology Evidence from adult naming times and a connectionist model. (with K. Bryant) Presented at the 7th International Morphological Processing Conference, San Sebastian, Spain, June 2011.
- 43. An ERP study of concreteness effects in imagery and associate generation: evidence for the dual coding theory. (with Paivio, A., McRae, K. & Welcome, S.) Meeting of the Cognitive Neuroscience Society, Montreal, Quebec, April, 2010. (Presented by A. Paivio)
- 44. *Multimodal profiles of object categories*. (with McNorgan, C., Barsalou, L. W. & McRae, K.) Meeting of the Cognitive Neuroscience Society, Montreal, Quebec, April 2010. (Presented by C. McNorgan)
- 45. Neural correlates of virtual reorientation. (with Sutton, J. & Newcombe, N. S.) Meeting of the Cognitive Neuroscience Society, Montreal, Quebec, April, 2010. (Presented by J. Sutton)

- 46. Do children with dyslexia actually have speech perception deficits? Evidence from behavioural and Event-Related Potential measures. (with Robertson, E.K.) Talk to be presented at The First Annual NeuroTalk Conference, Singapore Expo, April 2010, Singapore. (Presented by E.K. Robertson)*
- 47. The Roles of Tonal and Segmental Information in Mandarin Spoken Word Recognition: An Eyetracking Study. (with J.G. Malins) Psychonomic Society meeting, Boston, MA, November, 2009. (Presented by J.G. Malins)
- 48. On the Role of Rapid Temporal Processing in Pure Word Deafness. (with Martin, R., Slevc, L. & Hamilton, A.) Academy of Aphasia 47th Annual Meeting, Boston, MA, October, 2009. (Presented by R. Martin)
- 49. Differential ERP responses to coarticulatory violations in children with or without language impairment. (with Archibald, L) Symposium on Research in Child Language Disorders. Madison WI, July, 2009. (Presented by Archibald, L)
- 50. ERPs reveal the temporal dynamics of phonological processing across typical development. (with A.S. Desroches, M.F. Newman, E.M. Morson & J.R. Booth) Organization for Human Brain Mapping, June, 2009, San Francisco, CA. (Presented by A.S. Deroches)
- 51. Identifying neural markers of language processing deficits in developmental dyslexia. Talk presented at the Canadian Association for Neuroscience, May, 2009. Vancouver, BC. (Presented by A.S. Desroches, co-authored with Cone, N.E., & Booth, J.R.)*
- 52. ERPs reveal the temporal dynamics of phonological processing deficits in language impairment. (with A.S. Deroches, E.K. Robertson, J.G. Malins, R.L. Newman & L.M.D. Archibald) Society for Research in Child Development, April, 2009, Denver, CO. (Presented by A.S. Dersoches)
- 53. English sentence processing in young Deaf signers. (with K.N. Maxwell, C. Chovaz) Society for Research in Child Development, April, 2009, Denver, CO. (Presented by K.N. Maxwell)
- 54. Speech perception and phonology in developmental language and reading impairments: What's the connection? (with Robertson, E.K.) Talk presented at the International Association for Child Language, Edinburgh, UK, August 2008. (Presented by E.K. Robertson).*
- 55. Eyetracking reveals decreased sensitivity to phonetic features in developmental dyslexia. (with A.S. Desroches) Annual meeting of the Psychonomic Society, November, 2008, Chicago, IL. (Presented by A.S. Desroches)
- 56. Lexical tone processing in Mandarin Chinese: An eyetracking investigation. (with J.G. Malins). Talk given at the 3rd Annual Toronto Workshop on East Asian Languages, Toronto, ON, October 2008. (Presented by J.G. Malins)
- 57. The Brain Bases of Dyslexia and Specific Language Impairment in Children. Presentation to the Ontario Chapter of the International Dyslexia Association. October, 2008.*
- 58. Differences in speech perception across typical development: categorical versus gradient effects in perception. (with A.S. Desroches & S. Neilson) Presentation at the Canadian Society for Brain Behaviour and Cognitive Science, London, On, June, 2008.
- 59. Harvard University Biocomputation of Language group workshop: Specific language impairments (SLI) and faculty of language debate. (Invited discussant) Cambridge, MA, February, 2008.*
- 60. The influence of concurrent verbal working memory load on spatial orientation in a virtual environment. (with J.E. Sutton & H. Csikos) Poster presented at the Psychonomic Society Annual Meeting, Long Beach, CA, November, 2007. (Presented by J.E. Sutton)
- 61. *Nonword repetition: A messy measure?* (with L. Archibald & M. Shepherd) Presentation at the 28th Annual Symposium on Research in Child Language Disorders, Madison, WI, June, 2007.
- 62. Specific working memory impairments (SWMI) and specific language impairments (SLI): Identifiable groups. (with L. Archibald & TVDSB Language and Memory Group) Poster presentation at the 28th Annual Symposium on Research in Child Language Disorders, Madison, WI, June, 2007. (Presented by L. Archibald)

- 63. Phonological and speech processing deficits in developmental dyslexia and specific language impairment. Presented at the The Neurocognition of Developmental Language Disorders Workshop, Georgetown University, Washington DC, May 2007.*
- 64. Rapid Serial Naming across the lifespan: gender and age effects. (with P.M. Seeds, M. Schurter, K.M. Arnell, C.L. Barr, R.M. Klein & R. Tannock) Poster presented at 19th Association for Psychological Science Annual Convention, Washington DC, May, 2007. (Presented by P.M. Seeds)
- 65. Phonological mechanisms of spoken word recognition in children and adults: Evidence from event related potentials. (with A.S. Deroches, R.L. Newman & E.K. Robertson) Poster presented at the 14th Annual Meeting of the Cognitive Neuroscience Society, New York, NY, May 2007. (Presented by A.S. Deroches)
- 66. Neural processing of rule-like and irregular patterns in language: An fMRI study of past tense priming. (with A. Kielar & A.S. Deroches) Poster presented at the 14th Annual Meeting of the Cognitive Neuroscience Society, New York, NY, May 2007. (Presented by A. Kielar)
- 67. Examining implicit phonological priming using picture-word matching task and fMRI. (with R.L. Newman & A.S. Deroches) Poster presented at the 14th Annual Meeting of the Cognitive Neuroscience Society, New York, NY, May 2007. (Presented by R.L. Newman)
- 68. Temporal and frontal brain regions implicated in dyslexic children's auditory word processing deficits An fMRI study. (with R.L. Newman & A.S. Deroches) Poster presented at the 14th Annual Meeting of the Cognitive Neuroscience Society, New York, NY, May 2007. (Presented by A.S. Deroches)
- 69. The role of American Sign Language (ASL) proficiency in learning complex English syntax: evidence from Deaf children and adults. Poster presented at CUNY (La Jolla, CA). March, 2007. (Presented by K.N. Maxwell)
- 70. Speech perception deficits in children with language and reading impairments. An event-related potential study. (with E.K. Robertson, R.L. Newman & A.S. Deroches) Poster presented at the 2007 Biennial Meeting of The Society for Research on Child Development, Boston, MA, March 2007. (Presented by E.K. Robertson)
- 71. Auditory phonological processing in typically developing and reading impaired children: Evidence from event-related potentials. (with A.S. Deroches, R.L. Newman & E.K. Robertson) Poster presented at the Biennial Meeting of The Society for Research on Child Development, Boston, MA, March 2007. (Presented by A. S. Deroches)
- 72. Spoken Language and Reading Disabilities in Children. Presentation to the Developmental Disabilities Division (DDD) Research Group, The University of Western Ontario Schulich School of Medicine and Dentistry, London ON, December 2006.*
- 73. Predictors of English Reading Abilities in Young Deaf Signers of American Sign Language. (with Maxell, K.N., & Chovas McKinnon, C.) Poster presented at the Psychonomic Society Annual Meeting, Houston, TX, November, 2006. (Presented by K.N. Maxwell)
- 74. Phonological mechanisms of child language impairments. Talk presented at The Association francophone pour le savoir meeting, Montreal, Quebec, May, 2006.*
- 75. Phonological mechanisms of specific language impairment and dyslexia. Talk presented at the Computational Neuroscience Meeting, Washington, DC, November, 2005.*
- 76. Developmental dyslexia and specific language impairment: Is there a connection? (with E.K. Robertson) Talk presented at the joint meeting of the Canadian Society for Brain Behaviour and Cognitive Sciences and European Psychological Society. Montreal PQ, July, 2005.
- 77. Past tense verbs in English: A microcosm of a psycholinguistic theory. Lake Ontario Visionary Establishment, Niagara Falls, Ontario, February, 2005.*
- 78. Visualizing sounds in the brain: fMRI studies of phonology in language processing. Michigan State University, East Lansing MI, January, 2005.*

- 79. Phonological bases of language impairments: Evidence from behavioral studies and connectionist models. University of Louisville, Louisville, KY, December, 2004.*
- 80. Connectionist approaches to developmental language impairments in children. McGill University, Montreal, PQ, October, 2004.*
- 81. Past tense verbs in English: A microcosm of a psycholinguistic theory. Ebbinghaus Empire Seminar Series, University of Toronto, November, 2004.*
- 82. Phonology and working memory in sentence comprehension deficits. University of Toronto, Scarborough Campus, November, 2004.*
- 83. Phonology, semantics and the past tense: Evidence from impaired populations, connectionist models, and functional imaging. University of North Carolina, Chapel Hill, NC, March 2003.*
- 84. Developmental language and reading impairments in children, University of Toronto, Psychology Students Association, Toronto, Ontario, November 2002.*
- 85. Phonology, semantics and the past tense: Evidence from impaired populations, connectionist models, and functional imaging. Departmental Colloquium, McMaster University, Hamilton, Ontario, October 2002.*
- 86. Language impairments in children and adults: Evidence from connectionist models. McDonnell-Pew Seminar in Cognitive Neurosciences, Oxford University, Oxford UK, August 2000.*
- 87. Connectionist models of language impairments. MRC Cognitive and Brain Sciences Unit, Cambridge University, Cambridge UK, August 2000.*
- 88. Optimality Theory and Connectionism. Conference on Phonology and the Mental Lexicon, University of Alberta, Edmonton AB, April 1999.*

Research Funding: (2000 - present)

Start Date	End Date	Principal Investigator	Co- Investigator	Granting Agency	Grant Title	Total Amount
2015	2017	Hayden, E.	Joanisse	Ontario Mental Health Foundation	Children's neural and cortisol reactivity in depression-relevant contexts: A high- risk offspring study	\$74,847
2014	2019	Booth, J.	Joanisse	National Institute of Deafness and Other Communication Disorders (USA)	Interactive- specialization of language impairment	\$2,995,243
2013	2014	Joanisse		Beijing National University Open-Project Grants	fMRI Investigation of Second Language Proficiency and Age of Acquisition in Mandarin and English	¥50,000
2011	2016	Joanisse		NSERC Operating Grant Renewal	The neural bases of speech perception and phonology	\$260,000
2011	2014	Joanisse		NSERC	Accelerator Award	\$120,000

2011	2012	Mitchell	Joanisse	NSERC Research Tools and Instruments Grant	Eyetracking and 3D visualization: synergistic and ecologically valid approaches to neuroimaging research	\$109,066
2011	2012	Joanisse Co-PI with Hayden		UWO - Academic Development Fund new Research and Scholarly Awards	A preliminary investigation of the structural and functional neural correlates or early stress	\$7,700
2010	2011	Goodale	Joanisse	NSERC – Research Tools and Instruments	Transcranial magnetic stimulation for research in cognitive neuroscience	\$98,178
2010	2011	McRae	Joanisse	NSERC – Research Tools and Instruments	Eyetracker for language & concepts research group	\$54,353
2010	2011	Jared	Joanisse	Academic Development Fund Large Grants Competition	Electrophysiological studies of language and concept processing	\$86,384.69
2007	2010	Joanisse		CIHR	Neural bases of normal and impaired speech perception in children and adults	\$207,000
2006	2011	Joanisse		NSERC Operating Grant	The neural bases of speech perception and phonology	\$76,000
2006	2009	Joanisse	Newman	Scottish Rite Charitable Foundation	How does remediation change the brain? Multimodal imaging of children with dyslexia	\$105,000
2006	2010	Goodale	Joanisse, Culham, Menon, Chronik and 6 others	Ontario Research Foundation – Research Excellence Programme	Centre For Brain and Mind Neuroimaging Facility	\$2,280,000
2005	2009	Scollie	Joanisse, Seewald, Parsa, and Kertoy	NSERC – Collaborative Health Research Projects	Evaluation of frequency compression hearing aids for children	\$223,115
2005	2008	Klein	Joanisse	Networks	Rapid naming and	\$31,500

				Centre of Excellence	its contribution to reading ability	
2005	2005	Joanisse		Networks of Centre of Excellence	Computational Core Facility	\$30,000
2004	2009	Joanisse		Government of Ontario	Premier's Research Excellence Award	\$250,000
2004	2005	Joanisse		CIHR - INMHA Priority Announcement	The brain bases of speech perception	\$104,752
2004	2008	Joanisse		Government of Ontario	Premier's Research Excellence Award	\$150,000
2003	2008	Joanisse		CIHR - New Investigator Award	The Neural Bases of Specific Language Impairments and Dyslexia: Evidence from Neuroimaging	\$250,000
2003	2008	Joanisse		Network Centre of Excellence	Computational Modeling Core Facility	\$150,000
2003	2006	Joanisse	Klein, Tannock, Barr, Arnell	Network Centre of Excellence	Rapid naming and its contribution to reading ability	\$250,000
2003	2004	Joanisse	Gribble	UWO Faculty of Science Alumni Research Fund	Motor Learning in Dyslexia	\$7,500
2003	2004	Joanisse	Gribble	UWO Faculty of Science Alumni Research Fund	Motor Learning in Children	\$3,000
2001	2002	Joanisse		UWO Faculty of Science Alumni Research Fund	Program to Study Language Impairments in Children	\$4,000
2001	2006	Joanisse		NSERC Operating Grant	The neural bases of language	\$95,000
2001	2005	Joanisse		Networks of Centres of Excellence	Computational Core Facility	\$230,647
2001	2004	Klein	Joanisse	Networks Centres of Excellence	Rapid naming and its contribution to reading ability	\$50,000
2001	2002	Joanisse	Gribble, Everling, Kohler	Canada Foundation for Innovation	Interdisciplinary approaches to Cognitive Neuroscience	\$659,293
2001	2002	Joanisse		NSERC	Equipment Grant	\$20,715
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Service Contributions

Department

Dopartmont	
2014-present	Associate Chair, Graduate Studies, Psychology
2015-2017	Workload & Resource Planning Committee
2013-2015	Psychology Department Chair Selection Committee
2013-2015	Appointments Committee
2008-2014	Area Chair, Cognition and Perception
2011-2013	Space Committee
2008-2009	Workload & Resource Planning Committee
2006-2007	Ad-Hoc Committee – Departmental Constitution Review
2004-2006	Ethics Committee
2002-2004	Undergraduate Affairs Committee
2001- 2003	Annual Performance Evaluations Committee
11.5 9	
University	
2016	Co-Organizer: Brain and Mind Institute Summer Workshop in EEG and ERP
2008-2011	Subcommittee on Priorities in Academic Development – Academic Development Fund Large and Small Grants Selection Committee
2007	CIHR Mock Review Panel
2005-2007	Senate Review Board - Academic
2002-2006	Social Sciences Executive Committee
2002-2005	Social Sciences Faculty Grants Committee
2002-2003	Educational Policy Committee (stand-in member)
National/International	
2015-2016	Canadian Institutes For Health Research – Virtual Chair of Foundations Scheme Grant Selection Committee
2012-present	Tri-Council Panel on Responsible Conduct of Research (member: 2012-2015; chair: 2015-present)
2013-present	Canadian Journal of Experimental Psychology – Editorial board member
2013-2014	Canadian Institutes For Health Research – BSC Grant Selection Committee (permanent member)
2009-2013	Journal of Speech, Language and Hearing Research – Associate Editor
2010-2012	Canadian Institutes For Health Research – BSC Grant

Selection Committee (ad hoc member)

2008-2015 Cognition – Editorial board member

2008 Canadian Society for Brain, Behaviour and Cognitive

Sciences - Co-organizer of annual conference

2006-2008 Canadian Institutes For Health Research – Grant

Selection Committee for New Investigator Awards

2003 Canadian Language and Literacy Research Network –

Organizer of Computational Modelling Summer

Workshop

2001-2007 Canadian Language and Literacy Research Network –

Director, Computational Modelling Core Facility

Supervisory Activities

Postdoctoral Fellows Supervised

2016 (August) Christina Vanden Bosch der Nederlanden

(co-supervised with J. Grahn)

2015-2016 Veronica Whitford, Ph.D.

Assistant Professor at UT El Paso as of Sept 2017

2009-2012 Suzanne Welcome, Ph.D.

Current position: Assistant Professor at University of

Missouri St. Louis

2006-2010 Lisa Archibald, Ph.D.

Current position: Associate Professor at

The University of Western Ontario

2004-2006 Randy Newman, Ph.D.

Current position: Associate Professor at

Acadia University

Graduate Students Supervised

2015-present Nicolette Noonan (Ph.D.,

co-supervised with L. Archibald)

2013-present Alexandra Cross (MSc, ongoing)

2011-present Emily Nichols (MSc 2013, Ph.D. ongoing)

2008-2012 Laura Westmaas (M.Sc. 2010)

Currently working as sessional instructor at Fanshawe

College

2007-2013 Jeffrey Malins (M.Sc. 2009, Ph.D. 2013)

Currently postdoc fellow at Haskins Lab, New Haven CT,

USA

2006-2009 Kathy Maxwell (M.Sc. 2008)

Currently employed by government of Manitoba, heading

"Healthy Child Manitoba" child health policy initiative

2006-2008 Allison Andres (M.Sc. 2008)

Currently working as speech-language pathologist

2002-2009 Amy Desroches (M.A. 2004, Ph.D. 2009)

Current position: Assistant Professor, University of

Winnipeg

2001-2008 Erin Robertson (M.A. 2003, Ph.D. 2008)

Current position: Assistant Professor, Cape Breton

University

2001-2008 Aneta Kielar (M.A. 2003, Ph.D. 2008)

Current position: Postdoctoral Fellow, Baycrest Institute,

Toronto Ontario.

Undergraduate Honours Student Theses

2001-present Heather Beatton (2001)

Amy Desroches (2002)

Hannah Gordon, Stella Ng (2003)

Alexandra Terry (2004) Kathy Maxwell (2005)

Rachael Millard, Natasha Gomes, Katherine Freeman,

Carol Ann Williamson (2006) Stephanie Nielson (2007)

Rachel Rabi (2007)

Lisa Schwartz, Bronwyn Lamond (2010) Shadé Miller, Shale Farber (2013) Allie Gallinger, Melanie Russell (2014) Kayla Perlmutter, Scotia McKinlay (2015)

Amanda Martino (2016)